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Attorney's Docket No.: 99P7519US
Reply to Office action dated August 19, 2003

Remarks

I. Status of claims

Claims 1-11, 13, 14, and 16-31 were pending.

Claims 32-35 have been added.

II. Rejection of claims 1-3, 6, 8-11, 13, 16, 17-19, 21, 25-27, 29, and 30

The Examiner has rejected claims 1-3, 6, 8-11, 13, 16, 17-19, 21, 25-27, 29, and 30 under 35 U.S.C. § 103(a) over Knappe (U.S. 6,603,774) in view of Saito (U.S. 6,125,186).

A. Claims 1-3, 6, and 8-10

Independent claims 1 and 8 have been amended and now recite that a security algorithm is inserted within the communication path between the first telephony client and a sound device on the first computer, with the security algorithm performing cryptographic operations on audio data transmitted in at least one direction between the first telephony client and the sound device.

The Examiner has acknowledged that "Knappe fails to teach 'inserting a security algorithm within the communication path,'" and has relied on the teaching of Saito to make up for Knappe's failure to teach or suggest anything about inserting a security algorithm within a communication path between telephony clients. In Saito's approach, however, the trusted agents 14, 17, which encrypt data transmitted between the application programs 14, 17, are inserted between the associated application programs 13, 16 and network devices on the respective processing units; neither of the trusted agents 14, 17 is inserted between a telephony client and a sound device on the same computer, as now recited in independent claims 1 and 8. Saito does not even hint that the trusted agents 14, 17 could be inserted between the application programs 13, 16 and sound devices on the corresponding processing units. To the contrary, Saito expressly relies on the trusted agents 14, 17 to establish a communication path 18 between application programs 13, 16 and to handle encryption, transmission, and decryption of application program data transmitted over the communication path 18 (see, e.g., col. 5, lines 58-67). Accordingly, in Saito's approach, the trusted agents

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14, 17 necessarily must operate between the application programs 13, 16 and network devices on the respective processing units.

For at least these reasons, the Examiner's rejection of independent claims 1 and 8 under 35 U.S.C. § 103(a) over Knappe in view of Saito now should be withdrawn.

Claims 2, 3, and 6 incorporate the features of independent claim 1 and claims 9 and 10 incorporate the features of independent claim 8. Therefore, claims 2, 3, 6, 9, and 10 are patentable for at least the same reasons explained above.

B. Claim 11

Independent claim 11 has been amended and now recites that secure communication between the first and second telephony clients is facilitated by performing cryptographic operations on audio data transmitted in at least one direction between the first telephony client and a sound device on the first computer.

As explained above in connection with independent claims 1 and 8, the trusted agents 14, 17 in Saito's approach perform cryptographic operations between the application programs 13, 16 and network devices on the respective processing units 10, 15; neither of the trusted agents 14, 17 performs cryptographic operations between a telephony client and a sound device on the same computer, as now recited in independent claim 11.

For at least these reasons, the Examiner's rejection of independent claim 11 under 35 U.S.C. § 103(a) over Knappe in view of Saito now should be withdrawn.

C. Claims 13 and 16

Independent claim 13 has been amended and now recites that the computer readable medium includes computer code for encrypting audio signals received from an audio input device and transmitting the encrypted audio signals to the formatting module associated with a first telephony client.

In Saito's approach, the trusted agents 14, 17 encrypt signals received from the respective application programs 13, 16; they do not encrypt audio signals received from respective audio input devices. In addition, the trusted agents 14, 17 transmit encrypted signals to each other; they do not transmit encrypted audio signals to formatting modules

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associated with telephony clients on the same respective computers. Indeed, in telephone applications, since the audio data is formatted by the telephony client application programs 13, 16 before being encrypted in Saito's approach, there would not have been any motivation for one of ordinary skill in the art at the time of the invention to have transmitted the encrypted audio signals to the formatting modules associated with the either of the telephony client application programs 13, 16, as recited in claim 13.

For at least these reasons, the Examiner's rejection of independent claim 13 under 35 U.S.C. § 103(a) over Knappe in view of Saito now should be withdrawn.

Claim 16 incorporates the features of independent claim 13 and therefore is patentable for at least the same reasons explained above.

D. Claims 17-19

Each of independent claims 17-19 recites that the computer-readable medium includes computer code for encrypting audio signals received from an audio input device and transmitting the encrypted audio signals to the formatting module associated with the first telephony client.

In Saito's approach, the trusted agents 14, 17 encrypt signals received from application programs 13, 16. Therefore, in telephone applications, the trusted agents 14, 17 encrypt audio signals received from telephony client application programs 13, 16, which presumably receive audio signals from respective audio input devices. That is, after the telephony client application programs 13, 16 have formatted the audio signals received from the audio input devices, each trusted agent encrypts the formatted audio signals and transmits the encrypted audio signals to the other trusted agent over communication path 18. Accordingly, Saito teaches away from the computer readable media recited in claims 17-19, which include computer code for encrypting audio signals received from an audio input device and transmitting the encrypted audio signals to the formatting module associated with the first telephony client. Indeed, since the audio data is formatted by the telephony client application programs 13, 16 before being encrypted in Saito's approach, there would not have been any motivation for one of ordinary skill in the art at the time of the invention to have transmitted the encrypted audio signals to the formatting modules associated with the either of the telephony client application programs 13, 16, as recited in claims 17-19.

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For at least these reasons, the Examiner's rejection of independent claims 17-19 under 35 U.S.C. § 103(a) over Knappe in view of Saito now should be withdrawn.

E. Claims 21 and 25-27

Independent claim 21 recites that the computer readable medium includes computer code for receiving audio signals from an interpreting module associated with the first telephony client, decrypting the received audio signals, and outputting the decrypted audio signals for transmission to an audio output device.

In Saito's approach, the trusted agents 14, 17 decrypt signals received from the communication path 18 that is established between the trusted agents 14, 17. That is, in telephone applications, the trusted agents 14, 17 first decrypt audio signals received from the communication path 18 and, subsequently, transmit the decrypted audio signals to the telephony client application programs 13, 16 for interpretation. Accordingly, Saito teaches away from the computer readable media recited in claim 21, which includes computer code for decrypting audio signals received from an interpreting module associated with the first telephony client, and outputting the decrypted audio signals for transmission to an audio output device. Indeed, since the audio data is decrypted before being interpreted by the telephony client application programs 13, 16 in Saito's approach, there would not have been any motivation for one of ordinary skill in the art at the time of the invention to have performed the step of decrypting the interpreted audio data, as recited in claim 21.

For at least these reasons, the Examiner's rejection of independent claim 21 under 35 U.S.C. § 103(a) over Knappe in view of Saito now should be withdrawn.

Each of claims 25-27 incorporates the features of independent claim 21 and therefore is patentable for at least the same reasons explained above.

F. Claim 29

Independent claim 29 includes the steps of formatting an encrypted telephonic signal into a predetermined format that is recognizable by a second telephony system and transmitting the telephonic signal to the second telephony system after the telephonic signal has been encrypted and formatted.

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As explained above, in Saito's approach, the trusted agents 14, 17 encrypt signals received from application programs 13, 16. Therefore, in telephone applications, the trusted agents 14, 17 encrypt audio signals received from telephony client application programs 13, 16, which presumably receive audio signals from respective audio input devices. That is, after the telephony client application programs 13, 16 have formatted the audio signals received from the audio input devices, each trusted agent encrypts the formatted audio signals and transmits the encrypted audio signals to the other trusted agent. Accordingly, Saito teaches away from the method recited in claim 29 in which an encrypted telephonic signal is formatted into a predetermined format that is recognizable by a second telephony system and the telephonic signal is transmitted to the second telephony system after the telephonic signal has been encrypted and formatted. Indeed, since the audio data is formatted by the telephony client application programs 13, 16 before being encrypted in Saito's approach, there would not have been any motivation for one of ordinary skill in the art at the time of the invention to have performed the step of formatting the encrypted audio signals, as recited in claim 29.

For at least these reasons, the Examiner's rejection of independent claim 29 under 35 U.S.C. § 103(a) over Knappe in view of Saito now should be withdrawn.

G. Claim 30

Independent claim 30 recites the steps of receiving a telephonic signal that is formatted into a predetermined format by the second telephony client, interpreting the predetermined format of the received telephonic signal, and decrypting the interpreted telephonic signal.

As explained above, in Saito's approach, the trusted agents 14, 17 decrypt signals received from the communication path 18 that is established between the trusted agents 14, 17. That is, in telephone applications, the trusted agents 14, 17 first decrypt audio signals received from the communication path 18 and, subsequently, transmit the decrypted audio signals to the telephony client application programs 13, 16 for interpretation. Accordingly, Saito teaches away from the method recited in claim 30 in which a telephonic signal that is formatted into a predetermined format by the second telephony client is received, the predetermined format of the received telephonic signal is interpreted, and the interpreted telephonic signal is decrypted. Indeed, since the audio data is decrypted before being

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interpreted by the telephony client application programs 13, 16 in Saito's approach, there would not have been any motivation for one of ordinary skill in the art at the time of the invention to have performed the step of decrypting the interpreted audio signals, as recited in claim 30.

For at least these reasons, the Examiner's rejection of independent claim 30 under 35 U.S.C. § 103(a) over Knappe in view of Saito now should be withdrawn.

III. Rejection of claims 4, 5, and 28

The Examiner has rejected claims 4, 5, and 28 under 35 U.S.C. § 103(a) over Knappe in view of Saito and Crick (U.S. 5,675,793).

Claims 4 and 5 incorporate the features of independent claim 1 and claim 28 incorporates the features of independent claim 21. Crick, however, does not teach or suggest anything about inserting a security algorithm within the communication path between the first telephony client and a sound device on the first computer, as recited in independent claim 1. Crick also does not teach or suggest anything about receiving audio signals from an interpreting module associated with the first telephony client, decrypting the received audio signals, and outputting the decrypted audio signals for transmission to an audio output device, as recited in independent claim 21. Therefore, Crick does not make up for the failure of Knappe and Saito, taken alone or in any permissible combination, to render independent claims 1 and 21 obvious. Accordingly, dependent claims 4, 5, and 28 are patentable for at least the same reasons explained above.

IV. Rejection of claim 7

The Examiner has rejected claim 7 under 35 U.S.C. § 103(a) over Knappe in view of Saito and Kavsan (U.S. 6,412,069).

Claim 7 incorporates the features of independent claim 1. Kavsan, however, does not teach or suggest anything about inserting a security algorithm within the communication path between the first telephony client and a sound device on the first computer, as recited in independent claim 1. Therefore, Kavsan does not make up for the failure of Knappe and

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Saito, taken alone or in any permissible combination, to render independent claim 1 obvious. Accordingly, dependent claim 7 is patentable for at least the same reasons explained above.

V. Rejection of claims 14, 20, and 22-24

The Examiner has rejected claim 14, 20, and 22-24 under 35 U.S.C. § 103(a) over Knappe in view of Saito and the Examiner's unsubstantiated assertions regarding the general teachings of the prior art.

Claim 14 incorporates the features of independent claim 13 and claims 22-24 incorporate the features of independent claim 21. Since the Examiner's unsubstantiated assertions do not make up for the failure of Knappe and Saito, taken alone or in any permissible combination, to render independent claims 1 and 21 obvious, claims 14 and 22-24 are patentable for at least the same reasons explained above.

Independent claim 20 recites that the computer-readable medium includes computer code for encrypting audio signals received from an audio input device and transmitting the encrypted audio signals to the formatting module associated with the first telephony client.

As explained above, in Saito's approach, the trusted agents 14, 17 encrypt signals received from application programs 13, 16. Therefore, in telephone applications, the trusted agents 14, 17 encrypt audio signals received from telephony client application programs 13, 16, which presumably receive audio signals from respective audio input devices. That is, after the telephony client application programs 13, 16 have formatted the audio signals received from the audio input devices, each trusted agent encrypts the formatted audio signals and transmits the encrypted audio signals to the other trusted agent over communication path 18. Accordingly, Saito teaches away from the computer readable medium recited in claim 20, which includes computer code for encrypting audio signals received from an audio input device and transmitting the encrypted audio signals to the formatting module associated with the first telephony client. Indeed, since the audio data is formatted by the telephony client application programs 13, 16 before being encrypted in Saito's approach, there would not have been any motivation for one of ordinary skill in the art at the time of the invention to have transmitted the encrypted audio signals to the formatting modules associated with the either of the telephony client application programs 13, 16, as recited in claim 20.

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The Examiner's unsubstantiated assertions do not make up for the failure of Knappe and Saito, taken alone or in any permissible combination, to render independent claim 20 obvious. Therefore, for at least the reasons explained above, the Examiner's rejection of claims 14, 20, and 22-24 under 35 U.S.C. § 103(a) now should be withdrawn.

VI. New claims 32-35

New claims 32 and 33 incorporate the features of independent claim 1 and new claims 34 and 35 incorporate the features of independent claim 8. Therefore, new claims 32-35 are patentable for at least the same reasons explained above.

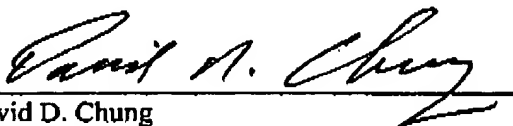
VII. Conclusion

For the reasons explained above, all of the pending claims are now in condition for allowance and should be allowed.

Charge any excess fees or apply any credits to Deposit Account No. 08-2025.

Respectfully submitted,

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